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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/621,645

07/24/2000

Robert E. Bridges

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EXAMINER

LEE, HWA S

ART UNIT

PAPER NUMBER

2886

NOTIFICATION DATE

DELIVERY MODE

03/25/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptopatentmail@cantorcolburn.com

Office Action Summary	Application No. 09/621,645	Applicant(s) BRIDGES ET AL.	
	Examiner Hwa S. Andrew Lee	Art Unit 2886	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-20 and 43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-12,16-20 and 43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites the limitation "the laser radiation" in the last clause. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 9-12, 16-20, and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Tearney et al (US 6,134,003).

Tearney et al (Tearney hereinafter) show optical measurements using a fiber optic imaging endoscope comprising:

a first portion (not explicitly shown, but inherent) having at least a first source (e.g. 2) or a first optical detector (e.g. 16);

a second portion (e.g. Figure 8, "proximal end of endoscopic unit 34") rotatable with respect to the first portion;

a first motor (74) structured to rotate the second portion with respect to the first portion; and

at least a first optical fiber system (e.g. 22, 32, 44, 106, etc) that connects to both the first light source and the first optical detector, the first optical fiber system having an emission end disposed (e.g. distal end of fiber 44) on the second portion for emitting and configured to emit light to the remote target (14) and to receive light reflected from the remote target,

wherein an emission direction of a radiation of the first source is fixed with respect to the second portion (the radiation is directed at the second portion through fiber optics)

With respect to claim 2, Tearney shows at least three optical fibers (22, 32, 44) and a coupler assembly (e.g. 72) wherein the third optical fiber (e.g. 32) has the emission end coupled to the first and second optical fibers by the coupler assembly.

With respect to claim 3, the couple assembly is disposed on one of the first and second portion.

With respect to claim 4, 16-18, claim 4 is drawn to function which does not have patentable weight; however, the imaging system of Tearney operates by determining distance to elements of the sample.

With respect to claim 9, the emission end of the fiber 44 acts a beam expander (see figure 16).

With respect to claim 10, since the beam is reflected back by the sample, the sample acts as a retroreflector.

With respect to claim 11, detector 16 detects reflected light from the remote target.

With respect to claim 12, please see rotation mechanism 135.

With respect to claims 19 and 20, the system of Tearney is a camera.

With respect to claim 43, lens 256 or GRIN lens 72 collimates light.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5-7 rejected under 35 U.S.C. 103(a) as being unpatentable over Tearney as applied to claim 1 above and further in view of Official Notice that the use of multiple light sources and optically connecting them with a beamsplitter is well known.

At the time of the invention, one of ordinary skill in the art would use additional light sources in order to increase light intensity, for redundancy for reliability, or increase the bandwidth. In addition, the artisan would have used a beamsplitter for its known ability to combine beams from multiple sources together where one beam passes through the beam splitting interface of the beamsplitter and the other beam is reflected by the beam splitting interface.

Allowable Subject Matter

Claims 13-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hwa S. Andrew Lee whose telephone number is 571-272-2419. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur R. Chowdhury can be reached on 571-272-2800. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hwa S. Andrew Lee/
Primary Examiner, Art Unit 2886